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# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

7

Application Number

09/776,233

Filing Date

February 2, 2001

First Named Inventor

Nikolai F. Sepetov

Group Art Unit

Unassigned

Examiner Name

Unassigned

Attorney Docket Number

33-000320US

## ENCLOSURES (check all that apply)

- ☐ Fee Transmittal Form
- ☐ Fee Attached
- ☐ Amendment / Response
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☒ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/Incomplete Application
- ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53

- ☐ Assignment Papers (for an Application)
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition Routing Slip (PTO/SB/69) and Accompanying Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Small Entity Statement
- ☐ Request for Refund

- ☐ After Allowance Communication to Group
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
- ☐ Proprietary Information
- ☐ Status Letter
- ☒ Additional Enclosure(s) (please identify below):

1449, 47 cited references, receipt acknowledgment postcard

### Authorization to Charge Deposit Account

Please charge Deposit Account No. 50-0893 for any additional fees associated with this paper or during the pendency of this application, including any extensions of time for consideration of the documents enclosed.

Remarks

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm  
or  
Individual name

Christopher C. Sappenfield Reg. No. 45,073 The Law Offices of Jonathan Alan Quine

Signature

Date

July 10, 2001

## CERTIFICATE OF MAILING

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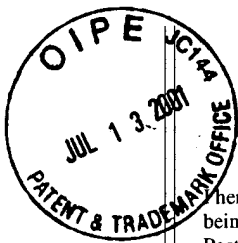
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July 10, 2001



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The Law Offices of Jonathan Alan Quine

By Alexandra Allison  
Alexandra Allison

Attorney Docket No. 33-000320US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Nikolai F. Sepetov, *et al.*

Application No.: 09/776,233

Filed: February 2, 2001

For: NONREDUNDANT SPLIT/POOL  
SYNTHESIS OF COMBINATORIAL  
LIBRARIES

Examiner: Unassigned

Art Unit: Unassigned

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR § 1.97 and  
§ 1.98

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The references cited on attached form PTO-1449 are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and



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no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 50-0893. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

Christopher C. Sappenfield  
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Substitute for form 1449A-B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>	Complete if Known	
	Application Number	09/776233
	Filing Date	February 2, 2001
	First Named Inventor	Nikolai F. Sepetov
	Group Art Unit	Unassigned
	Examiner Name	Unassigned
	Attorney Docket Number	33-000320US

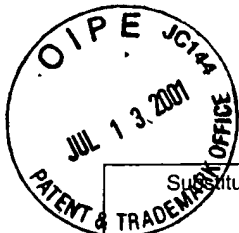
U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appeal
		Number	Kind Code (if known)			
	AA	4,631,211		Houghten	12-23-1986	
	AB	5,143,854		Pirrung et al.	09-01-1992	

FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	Number	Kind Code (if known)				

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T
	AC	Barnes et al. (1998) <u>S. Rec. Res. Dev. Org. Chem.</u> 2:367-379			
	AD	Berlin et al. (1997) "Spectrometrically Monitored Selection Experiments-Quantitative Laser Desorption Mass Spectrometry of Small Chemical Libraries," <u>Chem. Biol.</u> 4:63-77			
	AE	Brummel et al. (1996) "Evaluation of Mass Spectrometric Methods Applicable to the Direct Analysis of Non-Peptide Bead-Bound Combinatorial Libraries," <u>N. Anal. Chem.</u> 68:237-242			
	AF	Bunin and Ellman (1992) "A general and expedient method for the solid phase synthesis of 1,4-benzodiazepine derivatives," <u>J. Amer. Chem. Soc.</u> 114:10997-10998			
	AG	Carrasco et al. (1997) "Direct Monitoring of Organic Reactions on Polymeric Supports," <u>Tetrahedron Lett.</u> 38:6331-6334			
	AH	Chu et al. (1993) "Using affinity capillary electrophoresis to identify the peptide in a peptide library that binds most tightly to vancomycin," <u>J. Org. Chem.</u> 58:648-652,			
	AI	Czarnik (1997) "Encoding methods for combinatorial chemistry," <u>Curr. Opin. Chem. Biol.</u> 1:60-66			
	AJ	Davis and Swayze (2000) "Automated solid-phase synthesis of linear nitrogen-linked compounds," <u>Biotechnol. Bioeng.</u> 71:19-27			
	AK	Demirev and Zubarev (1997) "Probing combinatorial library diversity by mass spectrometry," <u>Anal. Chem.</u> 69:2893-2900			
	AL	DeWitt et al. (1993) "'Diversomers': an approach to nonpeptide, nonoligomeric chemical diversity," <u>Proc. Natl. Acad. Sci. USA</u> 90:6909-6913			

Examiner Signature		Date Considered	
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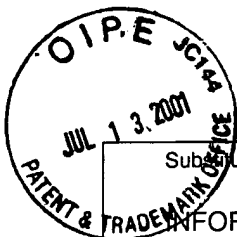


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	Group Art Unit	<b>Unassign d</b>
	Examiner Name	<b>Unassigned</b>
	Attorney Docket Number	<b>33-000320US</b>

AM	Enjalbal et al., (2000) "Mass spectrometry in combinatorial chemistry," <u>Mass Spectrom. Rev.</u> 19:139-161	
AN	Fitch et al. (1994) "High-resolution (1)H NMR in solid-phase organic synthesis," <u>J. Org. Chem.</u> 59:7955-7956	
AO	Gao et al. (1996) "Screening derivatized peptide libraries for tight binding inhibitors to carbonic anhydrase II by electrospray ionization mass spectrometry," <u>J. Med. Chem.</u> 39:1949-1955	
AP	Geysen et al. (1986) "A priori delineation of a peptide which mimics a discontinuous antigenic determinant," <u>Mol. Immunol.</u> 23:709-715	
AQ	Geysen et al. (1987) <u>J. Immun. Meth.</u> 102:259-274	
AR	Haag (2000) "Chemspeed Ltd.: Automated and unattended parallel synthesis integrating work-up and analysis," <u>Chimia</u> 54:163-164,	
AS	Haap et al. (1998) "FT-IR Mapping -- A New Tool for Spatially-Resolved Characterization of Polymer-Bound Combinatorial Compound Libraries with Ir Microscopy," <u>Angew. Chem. Int. Ed.</u> 37(23):3311-3314	
AT	Houghten (1985) "General method for the rapid solid-phase synthesis of large numbers of peptides," <u>Proc. Natl. Acad. Sci. USA</u> 82:5131-5135	
AU	Houghten et al. (1991) "Generation and use of synthetic peptide combinatorial libraries for basic research and drug discovery" <u>Nature</u> 354:84-86	
AV	Hu et al. (2000) "Automated solid-phase synthesis and photophysical properties of oligodeoxynucleotides labeled at 5'-aminothymidine with Ru(bpy)(2)(4-m-4'-cam-bpy)(2+)," <u>Inorg. Chem.</u> 39:2500-2504	
AW	Hughes (1998) "Design of self-coded combinatorial libraries to facilitate direct analysis of ligands by mass spectrometry," <u>Med. Chem.</u> 41:3804-3811	
AX	Keifer (1996) "Influence of resin structure, tether length, and solvent upon the high-resolution (1)H NMR spectra of solid-phase-synthesis resins," <u>J. Org. Chem.</u> 61:1558-1559	
AY	Keifer et al. (2000) "Direct-injection NMR (DI-NMR): A flow NMR technique for the analysis of combinatorial chemistry libraries," <u>Journal of Combinatorial Chemistry</u> 2; 151-171	
AZ	Konings et al. (1996) "Deconvolution of combinatorial libraries for drug discovery: theoretical comparison of pooling strategies," <u>J. Med. Chem.</u> 39:2710-2719	
BA	Lake et al. (2000) "Sample preparation for high throughput accurate mass analysis by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry," <u>Rapid Commun. Mass Spectrom.</u> 14:1008-1013	

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	Group Art Unit	<b>Unassigned</b>
	Examiner Name	<b>Unassigned</b>
	Attorney Docket Number	<b>33-000320US</b>

BB	Lam et al. (1997) "The 'one-bead-one-compound' combinatorial library method," <u>Chem. Rev.</u> 97:411-448
BC	Lewis et al. (2000) "Automated high-throughput quantification of combinatorial arrays," <u>American Pharmaceutical Review</u> 3:63-68
BD	McGregor and Muskal (1999) "Pharmacophore fingerprinting 1. application to QSAR and focused library design," <u>J. Chem. Inf. Comput. Sci.</u> 39:569-574
BE	Meldal (1992) "PEGA: A flow stable polyethylene glycol dimethyl acryamide copolymer for solid phase synthesis," <u>Tetrahedron Lett.</u> 33:3077
BF	Merrifield (1985) "Solid phase synthesis (Nobel lecture)," <u>Angew. Chem.</u> 97:801
BG	Metzger et al. (1993) "Ion-spray mass spectrometry and high-performance liquid chromatography. Mass spectrometry of synthetic peptide libraries," <u>Angew. Chem. Int. Ed.</u> 32:894-896
BH	Moran et al. (1995) <u>J. Am. Chem. Soc.</u> 117:10787-10788
BI	Newcomb et al. (1998) "Analysis of 9-fluorenylmethoxycarbonyl (Fmoc) loading of solid-phase synthesis resins by gas chromatography," <u>Biotech. Bioeng. (Comb. Chem.)</u> 61:55-60
BJ	Nicolaou et al. (1995) <u>Angew. Chem. Int. Ed. Engl.</u> 34:24-2479
BK	North (2000) "Implementation of analytical technologies in a pharmaceutical development organization-looking into the next millennium," <u>Journal of Automated Methods and Management in Chemistry</u> 22:41-45
BL	Pickett et al. (1998) "Strategies for the design and comparison of combinatorial libraries using pharmacophoric descriptors," <u>J. Chem. Inf. Comput. Sci.</u> 38:144-150
BM	Pirrung et al., Pirrung (1997) "Spatially addressable combinatorial libraries," <u>Chem. Rev.</u> 97:473-488
BN	Schriemer et al. (1998) "Microscale Frontal Affinity-Chromatography with Mass-Spectrometric Detection - A New Method for the Screening of Compound Libraries," <u>Angew. Chem. Int. Ed.</u> 37(24):3383-3387
BO	Stevanovic and Jung (1993) "Multiple sequence analysis: Pool sequencing of synthetic and natural peptide libraries," <u>Anal. Biochem.</u> 212:212-220
BP	van Breemen et al. (1997) "Pulsed ultrafiltration mass spectrometry: A new method for screening combinatorial libraries," <u>Anal. Chem.</u> 69:2159-2164
BQ	Wilson-Lingardo et al. (1996) "Deconvolution of combinatorial libraries for drug discovery: experimental comparison of pooling strategies," <u>J. Med. Chem.</u> 39:2720-2726

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	Examiner Name	<b>Unassigned</b>
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	BR	Xiao and Nova (1997) <u>Comb. Chem.</u> 135-152	
	BS	Xiao et al. (1997) <u>Angew. Chem. Int. Ed. Engl.</u> 36:780-782	
	BT	Youngquist et al. (1994) "Matrix-assisted laser desorption ionization for rapid determination of the sequences of biologically active peptides isolated from support-bound combinatorial peptide libraries," <u>Rapid Commun. Mass Spectrom.</u> 8:77-81	
	BU	Zuckermann et al. (1992) "Design, construction and application of a fully automated equimolar peptide mixture synthesizer," <u>Int. J. Peptide Prot. Res.</u> 40:497-506	

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